As I consider the role of information technology in higher education, I am reminded of the old joke: “How many psychiatrists does it take to change a lightbulb? None, because the lightbulb has to want to change.” We could apply this logic to higher education by asking: “How many IT professionals does it take to change higher education? None, because higher education has to want to change.”

I have seen much frustration coming from IT professionals who do not understand why a faculty member will not embrace the latest and greatest technology to “improve” the learning experience for students. Similarly, I have heard IT professionals ask why end-users cannot adapt their reporting requirements to accept what is offered by a new software system.

I suspect that much of the frustration stems from a failure to recognize the two distinct—and very different—cultures of IT and of higher education. The world of IT is fast-paced and ever-changing. IT professionals are often drawn to the dynamism and fast pace of that culture and are eager to embrace change. The culture of higher education, by contrast, is slower paced. Formal changes in higher education are often the product of long discussions and negotiations, often through institutionalized governance structures. Cultural change also tends to occur slowly in higher education—often as a gradual evolution whereby individual faculty, staff, and administrators change their behaviors over a period of time until, finally, a critical mass is reached and the organization arrives at a new level of technological sophistication.

There is a natural tension between the fast-paced culture of IT and the slower-paced culture of higher education. The challenge for IT professionals in higher education is to develop strategies to resolve that cultural tension in ways that create new opportunities and sustain a vibrant learning environment in the organization.

To operate effectively in this dual organizational culture, IT professionals must continually gauge whether a “push” strategy or a “pull” strategy is the appropriate response in a given situation. “Push strategies” are called for when others in the or-
ganization have clear goals and objectives and are relying on IT to provide the technological systems that will support efforts in those areas. In such cases, IT effectiveness takes the form of responsive customer service, sound management, and systems maintenance.

“Pull” strategies involve leadership—leading organizational change. These strategies may involve identifying specific organizational needs and outlining potential solutions to those needs. For example, one can imagine an IT team taking the lead in identifying the need for distance learning opportunities and in providing a range of ways to create those opportunities. In such cases, leadership involves walking a delicate line between advocating for specific technology solutions and remaining responsive to institution-defined needs. Once others in the organization choose among the distance learning solutions offered, the IT team can move back to the “push” strategy of service, management, and maintenance.

“Pull” strategies may also involve the more nebulous task of leading cultural change in the organization. It is the IT team that is most likely to recognize the power of a new technological process—whether that process involves interfacing a desktop computer and PalmPilot, integrating Web-based instruction into the classroom, or using standardized electronic calendars throughout the organization. The surest path to failure in higher education is to assume that everyone will immediately understand the advantages of a new system—that everyone will realize the idea is a “no-brainer.” A definite way to encounter resistance is to be seen as advocating change for change’s sake and technology for technology’s sake.

To be effective in leading cultural change, IT professionals must be particularly cognizant of the dual IT and higher education cultures. In particular, IT professionals must articulate the change not just in terms of new technology but also in terms of institutional strategy. Why is this a good idea? What educational or other organizational goals will it help the institution achieve? Why is it worth the investment of individuals’ time and energy to learn the new technology?

Often, change in higher education comes one individual at a time—and slowly at that. For those who are accustomed to an IT culture that embraces change, this can be extraordinarily frustrating. Leadership requires patience and persistence. IT leaders must be willing to keep their fingers on the pulse of the organization, by monitoring what is working and not working in the area of technological adaptation.

Effective IT leaders recognize that success does indeed occur—perhaps not as quickly as they would like but, rather, when the organization is both technologically and culturally ready. When enough individuals incorporate new processes into their work habits, and a critical mass is reached, cultural transformation can occur. Remember, there was a time when “technological innovations” such as e-mail and PowerPoint were viewed with suspicion and resistance. No longer. Both of these innovations have become integrated into the culture and norms of communication within higher education. Cultural change happens.

In short, there are four lessons for IT professionals who want to be effective leaders in higher education:

■ Understand, expect, and respect the differences between the cultures of IT and higher education.
■ Navigate between “push” and “pull” strategies to facilitate and sustain effective change.
■ Articulate IT opportunities in the context of broader institutional strategies and in the language of higher education.
■ Understand that organizational change may occur only over time, after a critical mass of individuals has embraced a new process or new technology.

So, to go back to my initial question: How many IT professionals does it take to change higher education? None—unless those IT professionals can help higher education want to change.

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